PII: S0010-4825(02)00046-X

CONTENTS OF VOLUME 32

NUMBER 1

Rainer Lindemuth, Dieter Mink, Christine Ernzerhof and Klaus Schimrigk — 1 — Automated and representative fascicle selection for computer-assisted morphometry of myelinated nerve fibres in peripheral nerves

Yong Hu, Keith. Dipkei Luk, William Weijia Lu and John Chiyan Leong — 13 — Comparison of time–frequency analysis techniques in intraoperative somatosensory evoked potential (SEP) monitoring

Kurt Manal, Roger V. Gonzalez, David G. Lloyd and Thomas S. Buchanan — 25 — A real-time EMG-driven virtual arm

Jong-Min Lee, Dae-Lin Kim, In-Young Kim, Kwang-Suk Park and Sun I. Kim — 37 — Detrended fluctuation analysis of EEG in sleep apnea using MIT/BIH polysomnography data

U. Rajendra Acharya, P. Subbanna Bhat and U.C. Niranjan — 49 — Comprehensive visualization of cardiac health using electrocardiograms

NUMBER 2

Shu-Yen Wan, Erik Ritman and William Higgins — 55 — Multi-generational analysis and visualization of the vascular tree in 3D micro-CT images

F. Boschetti, S. Mantero, F. Miglietta, M.L. Costantino, FM. Montevecchi and R. Fumero — 73 — An approach to computer automation of the extracorporeal circulation

Yanping Xiang and Kim-Leng Poh — 85 — Time-critical dynamic decision modeling in medicine

Mia K. Markey, Joseph Y. Lo, Rene Vargas-Voracek, Georgia D. Tourassi and Carey E. Floyd Jr. — 99 — Perceptron error surface analysis: a case study in breast cancer diagnosis

NUMBER 3

Jochen R. Moehr — 111 — Evaluation of health information systems: beyond efficiency and effectiveness

Jochen R. Moehr	113	Evaluation: salvation or nemesis of medical informatics?
James G. McDaniel	127	Improving system quality through software evaluation
Andre Kushniruk	141	Evaluation in the design of health information systems: application of approaches emerging from usability engineering
James G. Anderson	151	Evaluation in health informatics: computer simulation
Arminée Kazanjian and Carolyn J Green	165	Beyond effectiveness: the evaluation of information systems using a comprehensive health technology assessment framework
James G. Anderson	177	Evaluation in health informatics: social network analysis
Andrew Grant, Ianik Plante, Fréderic Leblanc	193	The TEAM methodology for the evaluation of information systems in biomedicine
Nicola T. Shaw	207	'CHEATS': a generic information communication technology (ICT) evaluation framework
Denis Protti	219	A proposal to use a balanced scorecard to evaluate *Information for Health*: an information strategy for the modern NHS (1998–2005)

NUMBER 4

Yoichi Hayashi and Rudy Setiono	237	Combining neural network predictions for medical diagnosis
Mark M. Stecker	247	The effects of automatic artifact rejection on evoked potential recordings
Dan Li and Ranu Jung	261	Tracking rhythmicity in nonstationary quasi-periodic biomedical signals using adaptive time-varying covariance
S. Ramtani, E. Fernandes-Morin and D. Geiger	283	Remodeled-matrix contraction by fibroblasts: numerical investigations
S. Marino, A. De Gaetano, A. Giancaterini, D. Giordano, M. Manco, A.V. Greco and G. Mingrone	297	Computing DIT from energy expenditure measures in a respiratory chamber: a direct modeling method

NUMBER 5

Shin Huh, Terence A. Ketter, Kwang Hoon Sohn and Chulhee Lee	311	Automated cerebrum segmentation from three-dimensional sagittal brain MR images
E. Shalman, M. Rosenfeld, E. Dgany and S. Einav	329	Numerical modeling of the flow in stenosed coronary artery. The relationship between main hemodynamic parameters
Xinsheng Li, Jing Bai, Shuqi Cui and Shuzhong Wang	345	Simulation study of the cardiovascular functional status in hypertensive situation

T. Podnar, F. Runovc and M. Kordaš 363 Simulation of cardiovascular physiology: the diastolic function(s) of the heart

Angelo S. Milazzo Jr., J. René Herlong, Jennifer S. Li, Stephen P. Sanders, Mary Barrington and A. Resai Bengur 379 Real-time transmission of pediatric echocardiograms using a single ISDN line

June-Sic Kim, Jong-Min Lee, Yong-Hee Lee, Jae-Seok Kim, In-Young Kim and Sun I. Kim 389 Intensity based affine registration including feature similarity for spatial normalization

NUMBER 6

Robert S. Shapiro, Patrick P. Ko and Sheldon Jacobson 403 A pilot project to study the use of ultrasonography for teaching physical examination to medical students

Dmitry Belov and Viktor Lezhnev 411 Computer simulation of the inverse problem of electrocardiography: use of properties of harmonic functions

İnan Güler, Fırat Hardalaç and Elif Derya Übeyli 419 Determination of Behcet disease with the application of FFT and AR methods

İnan Güler, Fırat Hardalaç and Necaattin Barışçı 435 Application of FFT analyzed cardiac Doppler signals to fuzzy algorithm

İnan Güler, Fırat Hardalaç and Memduh Kaymaz 445 Comparison of FFT and adaptive ARMA methods in transcranial Doppler signals recorded from the cerebral vessels

Sarah K. Mullin and Peter J. Taylor 455 The effects of parallax on geometric morphometric data

Yan Sun, Kap Luk Chan and Shankar Muthu Krishnan 465 ECG signal conditioning by morphological filtering

Murilo E.D. Gomes, Homero N. Guimarães, Antônio L.P. Ribeiro and Luis A. Aguirre 481 Does preprocessing change nonlinear measures of heart rate variability?

Yan Ji and Jing Liu 495 Numerical studies on the effect of lowering temperature on the oxygen transport during brain hypothermia resuscitation

L. Zhang, R. Sankar and W. Qian 515 Advances in micro-calcification clusters detection in mammography

C. Neef, S.A. van Gils and W.L. IJzerman 529 Analogy between temperature-dependent and concentration-dependent bacterial killing